

Resource Summary Report

Generated by [kravitz2](#) on Sep 19, 2026

B6(SJL)-Piezo2^{tm2.2Apat/J}

RRID:IMSR_JAX:027720

Type: Organism

Proper Citation

RRID:IMSR_JAX:027720

Organism Information

URL: <https://www.jax.org/strain/027720>

Proper Citation: RRID:IMSR_JAX:027720

Description: Mus musculus with name B6(SJL)-Piezo2^{tm2.2Apat/J} from IMSR.

Species: Mus musculus

Notes: gene symbol note: piezo-type mechanosensitive ion channel component 2; mutant strain|congenic strain: Piezo2

Affected Gene: piezo-type mechanosensitive ion channel component 2

Genomic Alteration: targeted mutation 2.2; Ardem Patapoutian

Catalog Number: JAX:027720

Database: JAX Mice and Services

Database Abbreviation: JAX

Availability: live

Organism Name: B6(SJL)-Piezo2^{tm2.2Apat/J}

Record Creation Time: 20250513T053801+0000

Record Last Update: 20260919T054946+0000

Ratings and Alerts

No rating or validation information has been found for B6(SJL)-Piezo2^{tm2.2Apat/J}.

No alerts have been found for B6(SJL)-Piezo2^{tm2.2Apat/J}.

Data and Source Information

Source: [Integrated Animals](#)

Source Database: JAX Mice and Services

Usage and Citation Metrics

We found 18 mentions in open access literature.

Listed below are recent publications. The full list is available at [kravitz2](#) .

Hill RZ, et al. (2026) Renal PIEZO2 is an essential regulator of renin. *Cell*, 189(1), 161.

Fatima M, et al. (2026) A specialized population of hair afferents dedicated to transmitting mechanical itch. *Neuron*.

Zhu X, et al. (2026) Piezo1-mediated mechanotransduction in choroid plexus epithelial cells governs ciliogenesis and cerebrospinal fluid homeostasis. *Neuron*.

Passini FS, et al. (2025) Piezo2 in sensory neurons regulates systemic and adipose tissue metabolism. *Cell metabolism*, 37(4), 987.

Santiago C, et al. (2025) Activity-dependent development of the body's touch receptors. *Neuron*, 113(11), 1758.

Song Y, et al. (2025) Stratification of enterochromaffin cells by single-cell expression analysis. *eLife*, 12.

Cranfill SL, et al. (2025) Asymmetric lateral habenula function and peripheral neural mechanisms in regulating itch-evoked scratching. *Current biology : CB*, 35(24), 6180.

Kaplan HS, et al. (2025) Sensory input, sex and function shape hypothalamic cell type development. *Nature*.

Toma K, et al. (2024) Perivascular neurons instruct 3D vascular lattice formation via neurovascular contact. *Cell*, 187(11), 2767.

Schappe MS, et al. (2024) A vagal reflex evoked by airway closure. *Nature*, 627(8005), 830.

Servin-Vences MR, et al. (2023) PIEZO2 in somatosensory neurons controls gastrointestinal transit. *Cell*, 186(16), 3386.

Lu P, et al. (2023) MrgprA3-expressing pruriceptors drive pruritogen-induced alloknesis through mechanosensitive Piezo2 channel. *Cell reports*, 42(4), 112283.

Wolfson RL, et al. (2023) DRG afferents that mediate physiologic and pathologic mechanosensation from the distal colon. *Cell*, 186(16), 3368.

Xie Z, et al. (2023) Piezo2 channels expressed by colon-innervating TRPV1-lineage neurons mediate visceral mechanical hypersensitivity. *Neuron*, 111(4), 526.

Handler A, et al. (2023) Three-dimensional reconstructions of mechanosensory end organs suggest a unifying mechanism underlying dynamic, light touch. *Neuron*, 111(20), 3211.

Lehnert BP, et al. (2021) Mechanoreceptor synapses in the brainstem shape the central representation of touch. *Cell*, 184(22), 5608.

Zhou T, et al. (2020) Piezo1/2 mediate mechanotransduction essential for bone formation through concerted activation of NFAT-YAP1- β -catenin. *eLife*, 9.

Zhang M, et al. (2019) Mechanically Activated Piezo Channels Mediate Touch and Suppress Acute Mechanical Pain Response in Mice. *Cell reports*, 26(6), 1419.